



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,770	06/27/2003	Michael Yatziv	82225P8522	6441

8791 7590 09/21/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

KIM, HAROLD J

ART UNIT	PAPER NUMBER
----------	--------------

2182

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,770

Applicant(s)

YATZIV ET AL.

Examiner

Harold Kim

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-14,16-20,22-27,29-33 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-14,16-20,22-27,29-33 and 35-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Updated search necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS NON-FINAL**.
2. Claims 1, 3-7, 9-14, 16-20, 22-27, 29-33, and 35-39 are presented for examination.
3. Claim 35 is objected to under 37 CFR 1.75(c), as being of improper dependent form since it is a dependent claim of claim 28 which has been cancelled.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1, 3-7, 9-14, 16-20, 22-27, 29-33, and 35-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Starr et al., USPGPUB No. US 2004/0064590 A1.**

6. In re claim 1, Starr et al. shows a method comprising:

creating an atomic data storage unit [paragraph 0062, lines 7-15] containing a first type of data [data, paragraph 0062, line 8] requiring a first type of processing and a second type of data [checksum, paragraph 0062, line 8] requiring a second type of processing; and

transferring the first type of data to a first memory address space via a direct memory access operation [paragraph 0062, lines 10-18] and transferring the second type of data to a second memory address space via the direct memory access operation [paragraph 0062, lines 10-18; paragraph 0054], wherein the atomic data storage unit is a physical data storage parcel [paragraph 0047, lines 7-21] created by mapping [paragraph 0047, line 19] a plurality of virtual logical data storage blocks of a virtual data storage parcel [paragraph 0047] to a plurality of physical logical data storage blocks of the physical data storage parcel, the virtual logical blocks of a first size and the physical logical blocks of a second size [paragraph 0047, lines 16-25].

7. In re claim 3, Starr et al. shows the first type of data is system data contained in a parcel data field [paragraph 0062, line 8] and the second type of data is parameter data contained in a parcel parameter field [checksum, paragraph 0062, line 8].

8. In re claim 4, Starr et al. shows the first memory address space is a cache memory of a host processing system [paragraph 0053, last line].

9. In re claim 5, Starr et al. shows the first type of processing consists of data validation [fig 3].

10. In re claims 6 and 7, Starr et al. shows the parcel parameter field contains parcel-level redundancy data [checksum, paragraph 0062, line 8].

11. In re claim 9, Starr et al. shows the virtual data storage parcel includes eight virtual logical data blocks, the eight virtual logical data blocks mapped to a physical data storage parcel including nine physical logical data storage blocks [Nth storage unit, paragraph 0064, line 29; paragraph 0047].

Art Unit: 2182

12. In re claim 10, Starr et al. shows the nine physical logical data blocks are 512 bytes in length [inherent feature of storage unit shown in paragraph 0064, line 29].

13. In re claim 11, Starr et al. shows the size of each virtual logical data block varies within a data storage system [paragraph 0047, lines 8-11].

14. In re claim 12, Starr et al. shows initializing a direct memory access engine with a first set of initialization parameters specifying a memory address, a count and a size for each parcel data field and a second set of initialization parameters specifying a memory address, a count and a size for each parcel parameter field [68, fig 1; paragraph 0053, line 11 to paragraph 0054].

15. In re claim 13, Starr et al. shows the size of each parcel data field and the size of each parcel parameter field is fixed for a scope of the direct memory access operation [paragraph 0062, lines 7-10].

16. Claims 14, 16-20, 22-27, 29-33, and 35-39 are rejected under the same rationale as discussed above in claims 1, 3-7, and 9-13.

Conclusion

Updated search necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS NON-FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2182

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The centralized fax number is 571-273-8300.

The centralized hand carry paper drop off location is:

U.S. Patent and Trademark Office
Customer Service Window, Mail Stop _____
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application should be directed to the central telephone number (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Kim whose telephone number is 571-272-4148.

The examiner can normally be reached on Monday-Thursday 6AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 571-272-4083. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


KIM HUYNH
PRIMARY EXAMINER

9/19/05

Application/Control Number: 10/607,770

Page 6

Art Unit: 2182

A handwritten signature in black ink, appearing to be 'HK' or a stylized 'K'.

Harold J. Kim

Patent Examiner

September 19, 2005/HK